# **United States Department of the Interior Bureau of Land Management**

# **Environmental Assessment** for the McIntyre #1-3 ST

Little Snake Field Office 455 Emerson Street Craig, Colorado 81625

DOI-BLM-CO-N010-2012-0044-EA

July 2012



# **CHAPTER 1 - INTRODUCTION**

### 1.1 IDENTIFYING INFORMATION

CASEFILE/PROJECT NUMBER: COC74920

PROJECT NAME: McIntyre #1-3 ST

PROPONENT: Axia Energy, LLC.

BACKGROUND: This Environmental Assessment (EA) has been prepared by the BLM to analyze an Application to Drill (APD) for an oil well located in the existing Ridgeline Unit. This pad and wellbore have been in existence since 1982 and the facilities have been in place since this well went into production. The well pad is located on private surface/fee minerals. Cypress Production, Inc. proposed to re-enter this well and drill horizontally in an easterly direction to a bottom hole in Section 2 on private surface/fee minerals. An error was made in the directional drilling operations and the wellbore deviated into federal minerals with a bottom hole in Section 11, T. 7 N., R. 94 W. in lease COC74920. The drilling of this well without BLM approval was a major violation, pursuant to regulation 43 CFR 3162.3-1 and the operator was assessed a penalty and instructed to set a temporary bridge plug to isolate the federal minerals from the fee minerals. Cypress submitted the APD in January 2010. Cypress Production, Inc. sold the McIntrye Well #1-3 ST to Axia Energy, LLC. effective October 10, 2011 and agreed to be responsible under the terms and conditions of the lease for the operations conducted on the lease.

# 1.2 PROJECT LOCATION AND LEGAL DESCRIPTION

#### LEGAL DESCRIPTION:

- COC74920, McIntyre Well #1-3 ST, NESE, Sec. 3, T. 7 N., R. 94 W., 6<sup>th</sup> PM, Moffat County.
- See attached Proponent Provided Map

# 1.3 PURPOSE AND NEED

To allow development of federal oil and natural gas resources to meet the public's continuing economic demands for a dependable and affordable supply of oil and natural gas, while giving due consideration to the protection of other resource values. To facilitate the leaseholder's rights to develop oil and gas resources within their federal mineral leases in accordance with the Mineral Leasing Act of 1920, as amended and other applicable laws.

The requested Federal Action is needed to provide access across federal lands managed by the BLM and allow development of minerals within an existing federal unit, according to the

principles of multiple use, while maintaining the rights and obligations of other users and protecting resources in the Project Area.

#### 1.3.1 Decision to be Made

The BLM has prepared this EA to analyze the decision to approve the APD.

# 1.4 LAND USE PLAN (LUP) CONFORMANCE REVIEW

<u>PLAN CONFORMANCE REVIEW</u>: The proposed action was reviewed for conformance (43 CFR 1610.5, BLM MS 1601.03) with the following plan:

Name of Plan: Little Snake Record of Decision and Resource Management Plan (RMP)

Date Approved: October 2011

<u>Decision Language</u>: The Proposed Action is in conformance with the LUP because it is specifically provided for in the following LUP goals, objectives, and management decisions:

- Allow for the availability of the federal oil and gas estate (including coalbed natural gas) for exploration and development. Objectives for achieving these goals include:
- Identify and make available the federal oil and gas estate (including coalbed natural gas) for exploration and development.
- Facilitate reasonable, economical, and environmentally sound exploration and development of oil and gas resources (including coalbed natural gas).

Section/Page: Section 2.13 Energy and Minerals/page RMP-36

Other related documents that cover the proposed action:

Name of Plan: Colorado Oil and Gas Leasing & Development Final EIS Plan Amendment

Date Approved: October 1991

Section/Page: Record of Decision for the Oil and Gas Plan Amendment to the Little Snake Resource Management Plan/EIS, Chapter 2/ page 11.

#### 1.5 SCOPING PROCESS

**1.5.1 Scoping:** NEPA regulations (40 CFR §1500-1508) require that the BLM use a scoping process to identify potential significant issues in preparation for impact analysis. The principal

goals of scoping are to allow public participation to identify issues, concerns, and potential impacts that require detailed analysis.

# **External Scoping Summary:**

The action in this Environmental Assessment (EA) is included in the NEPA log posted on the Little Snake Field Office (LSFO) web site:

http://www.blm.gov/co/st/en/BLM\_Information/nepa/lsfo.html.

The Application for Permit to Drill (APD) has been posted in the public room of the LSFO for a 30-day public review period beginning 01/04/10 when the APD was received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays. No comments were received.

#### **CHAPTER 2 - PROPOSED ACTION AND ALTERNATIVES**

#### 2.1 INTRODUCTION

The purpose of this chapter is to provide information on the Proposed Action and Alternatives.

# 2.2 ALTERNATIVES ANALYZED IN DETAIL

# 2.2.1 Proposed Action

The Proposed Action would be to retroactively approve 1 APD originally submitted by Cypress Production Inc. on a lease that is now operated by Axia Energy, LLC (Axia). The operator proposes to produce the federal minerals from lease COC74920 via the McIntyre Well #1-3 ST, NESE, Sec. 3, T. 7 N., R. 94 W., 6<sup>th</sup> PM, Moffat County located on privately owned surface. The proposed well would be located approximately 25 miles west of the town of Craig, CO, north of HWY 40. An APD for the oil well has been filed with the LSFO and includes drilling and surface use plans that cover mitigation of impacts from drilling operations. Mitigation not incorporated by Axia in the drilling and surface use plan would be attached by the BLM as Conditions of Approval (COAs) to an approved APD and can be found as Attachment 2.

There was no new road or pad construction associated with this well. Surface disturbance and vehicular travel was limited to the existing well pad and access road. All existing disturbance is on private property and no federal right-of-way would be required for access. All access roads would be maintained as necessary to prevent erosion and accommodate year-round traffic.

The location was cleared of all vegetation and leveled for drilling. This well pad is 400' by 320', approximately 3.0 acres. Drill cuttings were contained in a reserve pit and the operator is regulated by the Colorado Oil & Gas Conservation Commission to meet their soils standards prior to pit closure.

The well is tied into an existing pipeline that is currently owned by Ridgeline Gathering Co. and was authorized under Right-of-Way grant COC65405 and was analyzed in Environmental Assessment CO-100-01-060 EA in 2001.

If the well proves unproductive, it would be properly plugged, the entire pad site would be and the access road would be reclaimed per Surface Use Agreement with the surface owner.

#### 2.2.2 No Action Alternative

The No Action alternative would be to reject the APD and the operator would not produce the federal minerals.

# CHAPTER 3 – AFFECTED ENVIRONMENT AND EFFECTS

# 3.1 INTRODUCTION

#### **Affected Resources:**

The CEQ Regulations state that NEPA documents "must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail" (40 CFR 1500.1(b)). While many issues may arise during scoping, not all of the issues raised warrant analysis in an environmental assessment (EA). Issues will be analyzed if: 1) an analysis of the issue is necessary to make a reasoned choice between alternatives, or 2) if the issue is associated with a significant direct, indirect, or cumulative impact, or where analysis is necessary to determine the significance of the impacts. Table 1 lists the resources considered and the determination as to whether they require additional analysis.

**Table 1.** Resources and Determination of Need for Further Analysis

Determination <sup>1</sup>	Resource	Rationale for Determination		
	Physical Resources			
PI	Air Quality	See Chapter 3		
NI	Floodplains	FEMA-identified 100-year floodplains are present in the general area above the proposed action. Development/disturbance within the floodplain is not proposed as part of this subsurface action. Therefore, it is unlikely there would be impact to this surface resource.		
PI	Hydrology, Ground	See Chapter 3 – Water Quality, Ground		
NI	Hydrology, Surface	See Water Quality, Surface		
PI	Minerals, Fluid	See Chapter 3		
NI	Minerals, Solid	There are no authorized coal leases, mineral material permits, or locatable mineral operations in the proposed Project Area.		
NI	Soils	Surface development/disturbance is not proposed as part of this subsurface action. Therefore, it is unlikely there would be impact to this surface resource.		
PI	Water Quality, Ground	See Chapter 3		

<b>Determination</b> <sup>1</sup>	Resource	Rationale for Determination		
NI	Water Quality, Surface	Ephemeral surface water appears to be likely on private surface above the proposed action. There are no identified water quality impairments or suspected water quality issues for waters influenced by the area considered in the proposed action (Lay Creek). Surface development/disturbance that could impact surface water quality is not proposed as part of this subsurface action, therefore it is unlikely there would be impact to this surface resource.		
	Biological Resources			
PI	Invasive, Non-native Species	See Chapter 3		
PI	Migratory Birds	See Chapter 3		
PI	Special Status Animal Species	See Chapter 3		
NP	Special Status Plant Species	There are no federally listed threatened, endangered, or BLM sensitive plant species populations identified within the vicinity of the proposed Project Area.		
NI	Upland Vegetation	No surface disturbance beyond existing conditions		
NI	Wetlands and Riparian Zones	Riparian resources (ephemeral drainages, springs, seeps) appear to be likely on private surface above the proposed action, however no condition assessment data exists for surface resources on private lands. Surface development/ disturbance that could impact riparian resources is not proposed as part of this subsurface action, therefore it is unlikely there would be impact to this surface resource.		
NP	Wildlife, Aquatic	Habitat for aquatic species does not exist within the Project Area.		
PI	Wildlife, Terrestrial	See Chapter 3		
NP	Wild Horses	The Proposed Action is not within a wild horse herd management area.		
	Heritage R	desources and the Human Environment		
PI	Cultural Resources	See Chapter 3		
NP	Environmental Justice	According to the most recent Census Bureau statistics (2000), there are no minority or low income populations within the LSFO.		
PI	Hazardous or Solid Wastes	See Chapter 3		
PI	Native American Religious Concerns	See Chapter 3		
PI	Paleontological Resources	See Chapter 3		
NI	Social and Economic Conditions	There would not be any substantial changes to local social or economic conditions.		
NI	Visual Resources	The project area is managed as Class III. Public surface lands are not part of this project.		
Resource Uses				
NP	Access and Transportation	There are no federal surface lands associated with this project.		

<b>Determination</b> <sup>1</sup>	Resource	Rationale for Determination	
NI	Fire Management	There would not be any changes to the fire management in the area if the project were to be approved.	
NP	Forest Management	No forest resources exist within or near the Project Area.	
NP	Lands with Wilderness Characteristics	There are no LWCs within the proposed Project Area. Public surface lands are not part of this project.	
NI	Livestock Operations	Would not affect other surface land uses.	
NI		There are federal lands designated as prime and unique farmlands as well as farmland of statewide importance on private surface above the Project Area. However, to conditionally qualify as prime farmland, soils in these areas must be irrigated and/or reclaimed of excess salts and sodium. None of these soils would become irrigated or otherwise manipulated so as to create conditions favorable to create prime farmland as part of this subsurface action. Therefore, it is unlikely there would be impact to this surface resource.	
NP	Realty Authorizations, Land Tenure	There are no realty authorizations within the proposed Project Area.	
NP	Recreation	There are no federal surface lands associated with this Project Area.	
Special Designations			
NP	Areas of Critical Environmental Concern	There are no ACECs within the proposed Project Area. Public surface lands are not part of this project.	
NP	Wilderness Study Areas	There are no WSAs within the proposed Project Area. Public surface lands are not part of this project.	
NP	Wild and Scenic Rivers	There are no WSRs within the proposed Project Area.	

<sup>&</sup>lt;sup>T</sup> NP = Not present in the area impacted by the Proposed Action or Alternatives. NI = Present, but not affected to a degree that detailed analysis is required. PI = Present with potential for impact analyzed in detail in the EA.

### 3.2 PHYSICAL RESOURCES

# 3.2.1 Air Quality and Climate

Affected Environment: Far-field ambient air quality and AQRV impact assessment were performed to quantify the hypothetical maximum pollutant impacts at Class I areas and a sensitive Class II area within the study area resulting from construction, drilling, and production emissions for the Little Snake RMP. The Class I and sensitive Class II receptor areas analyzed in the far-field modeling included—

- Mount Zirkel Wilderness Area (Class I)
- Eagles Nest Wilderness Area (Class I)
- Flat Tops Wilderness Area (Class I)
- Dinosaur National Monument (federal Class II, Colorado area designated with the same SO2 increment as federal Class I).

In summary, the modeling results indicate that impacts resulting from the implementation of the LSFO RMP-ROD would not exceed Colorado or National Ambient Air Quality Standards

(CAAQS and NAAQS) or PSD (Prevention of Significant Deterioration) increments within the PSD Class I and sensitive PSD Class II areas analyzed. The PSD increment analyses are for informational purposes only and do not constitute a regulatory PSD increment consumption analysis.

Environmental Consequences, Proposed Action: The Proposed Action falls well within the range of the Reasonable Foreseeable Development (RFD) of 3,031 wells analyzed in the LSFO RMP. Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide.

At a regional scale, atmospheric dust, caused by destabilization of soil as a result of land use changes coupled with drought conditions, is receiving increased attention for its ability to alter alpine environments. Dust covered snow melts faster because it can absorb more solar energy, which affects snowpack conditions and can result in earlier and faster spring runoff events. The Colorado Plateau has been identified as a primary dust source for several recent alpine dust events on the Western Slope of Colorado. Areas of low annual precipitation, little to no vegetation cover, and an available supply of sediment are of primary concern for mitigation of expanding or new sources of dust.

# Mitigation:

- Retaining as much vegetative cover as possible during the project and/or reclaiming and covering disturbed areas shortly following excavation should help keep localized dust down during dry periods.
- Reduce source emissions from drilling operations by minimizing the number of well pads using improved drilling technologies, such as horizontal drilling or other similar approaches that may become available during the expected oil and gas development and operation duration. This would result in decreased emissions of Particulate Matter (PM) during the construction of well pads and associated.
- Drill rig engines will meet EPA tiered emission standards requirements reflective of the year they begin operation in the LSFO.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Impacts: There are a limited number of air pollutant emission sources located within the LSFO; there are a few cities and towns, very limited oil and gas extraction activities, a few coal mines, and two coal-fired power plants. In the past, the Hayden and Craig Power Plants have historically been shown to have a significant impact on visibility at the Mount Zirkel Class I area (Watson et al. 1996). As a result of that study, and a subsequent legal consent decree, the Hayden and Craig Power Plants have installed pollution controls resulting in emission reductions of approximately 14,000 tons/year SO2 and 7,000 tons/year NOx for each plant. The analysis in

the LSFO RMP projected a maximum increase of 15 and 11 tons/year SO2 to the region, respectively (approximately 0.2 percent of the total power plants' SO2 reductions). It also projected an increase NOx emissions in the study area by 1,066 tons/year (approximately 8 percent of total power plants' SO2 reductions). Thus, as total SO2 and NOx emissions in the LSFO are lowered in the future, cumulative air quality and AQRV impacts are likely to be reduced from historic levels.

Reference: Additional Air Quality Impact Assessment to Support the LSFO Draft RMP and EIS, Moffat, Routt, and Rio Blanco Counties, CO.

#### 3.2.2 Minerals/Fluid

Affected Environment: The proposed well would be in favorability zone 4 (highest for oil and gas potential). This well would penetrate and produce from the Mancos formation.

Environmental Consequences, Proposed Action: The casing and cementing program would be adequate to protect all of the resources identified above. All coal seams and fresh water zones would also be protected. The blow out preventer (BOP) system would be adequately sized. All of these zones would be cased off.

Mitigation: None.

Environmental Consequences, No Action Alternative: Under the No Action alternative, there would be no development of federal fluid minerals and no effects on existing federal fluid mineral reservoirs.

Cumulative Impacts: This Moffat County area has been the location of energy development for over 50 years. There has been no communication or contamination as a result of the energy development. Operators have been diligent in the design and placement of surface casing and cement. It is unlikely that ground water quality would be impacted in the area.

#### 3.2.3 Water Quality/Ground

Affected Environment: Rocks at or near the surface consist of Cretaceous age, Fort Union. These rocks can and do contain potable, useable water.

Environmental Consequences, Proposed Action: There is the potential that during drilling and setting of surface casing the operation will encounter useable groundwater. Fresh to moderately saline groundwater (TDS concentration < 10,000 PPM) is likely to be found within these formations.

Mitigation: The APD contains a geologic downhole report that requires that the operator isolate and protect all fresh to moderately saline water (TDS < 10,000 PPM) that is encountered during drilling from communication and contamination with other fluids. The operator is required to submit a report showing the depth and analysis of all groundwater encountered during drilling.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Impacts: This Moffat County area has been the location of energy development for over 50 years. There has been no communication or contamination as a result of the energy development. Operators have been diligent in the design and placement of surface casing and cement. It is unlikely that ground water quality would be impacted in the area.

#### 3.3 BIOLOGICAL RESOURCES

### 3.3.1 Invasive/Non-Native Species

Affected Environment: Invasive and noxious weeds are present in the vicinity of the Project Area. Invasive annuals such as cheatgrass, halogeton and yellow allysum commonly occur. Additional invasive species of concern in the vicinity include white top, Canada thistle, knapweeds, perennial pepperweed and other biennial thistles. These species are on the Colorado list B of noxious weeds. Cheatgrass is on the Colorado List C of noxious weeds. Additional noxious weeds may also be present in the area. The BLM cooperates with the Moffat County Pest Management program to employ the principals of Integrated Pest Management to control noxious weeds on public lands.

Environmental Consequences, Proposed Action: The surface disturbing activities and associated traffic involved with construction of this well site, access road and support infrastructure and subsequent activities could have created an environment and provided a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles brought onto the sites could have introduced weed species. Wind, water, recreation vehicles, livestock and wildlife can also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (downy brome, yellow alyssum, blue mustard and other annual weeds) occur on adjacent areas and could occupy the disturbed areas. The bare soils and the lack of competition from a perennial plant community would allow these weed species to grow and could affect the establishment of seeded plant species. Establishment of perennial grasses and other seeded plants would be expected to provide the necessary control of invasive annual weeds. Additional seeding treatments of the disturbed areas may be required if initial seeding efforts are not successful.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas that would collect additional water. The largest concern in the Project Area would be for these species to have become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well. Prior to applying herbicides on BLM the operator must obtain an approved Pesticide Use Proposal (PUP).

Mitigation attached as Conditions of Approval to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications, would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds on public lands.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Effects: The proposed project could have increased the establishment and spread of noxious and invasive species, increasing the occurrence of weeds within the landscape. If noxious weeds establish in these plant communities the health of upland plant communities and associated ecological function would decline. Requirements to control and limit the spread of noxious weeds as included in the Conditions of Approval can decrease the potential for infestation. Under the No Action Alternative there would be no additional contribution to previous, existing or future weed infestations.

Mitigation: None.

# 3.3.2 Migratory Birds

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance towards meeting BLM's responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance emphasizes management of habitat for species of conservation concern by avoiding or minimizing negative impacts and restoring and enhancing habitat quality. The LSFO provides both foraging and nesting habitat for a variety of migratory bird species. Several species on the US Fish and Wildlife Service's (FWS) Birds of Conservation Concern (BCC) List occupy these habitats within the LSFO. The project is located in the Northern Rockies Bird Conservation Region.

Native plant communities in the Project Area are comprised primarily of sagebrush and juniper stands with an understory of grasses and forbs. A variety of migratory birds may utilize these vegetation communities within the Project Area during the nesting period (May through July) or during spring and fall migrations. Sandstone bluffs and juniper lined ridge tops provide nesting habitat for golden eagles and ferruginous hawks. These features can be found near the Project Area. There are three historical Golden Eagle nest sites within a mile of the Project Area. The Project Area contains potential nesting and/or foraging habitat for the following FWS 2008 BCC: ferruginous hawk, Brewer's sparrow, sage sparrow, sage thrasher and loggerhead shrike.

Environmental Consequences, Proposed Action: The well pad was originally constructed in late summer of 1986 and disturbed approximately 2.3 acres of migratory bird habitat. The proposed action occurred during the dates of 12/10/2001 to 2/4/2002. Since construction and drilling activities did not occur within the during the nesting season, negative impacts to migratory bird species through nest destruction or increased stress leading to nest abandonment was likely avoided. Overall, the project has not had a measurable influence on the abundance or distribution of migratory birds at a regional scale.

Mitigation: None.

Environmental Consequences, No Action Alternative: Proposed Action has already occurred and impacts would be the same as proposed action.

Cumulative Effects: Development in the area would contribute to activity simultaneous with and in addition to ongoing natural gas and mineral development, grazing and recreation use (primarily hunting) in the LSFO. Initial disturbance to migratory birds (e.g., construction, drilling, and completion activities), was likely relatively localized and temporary. After the initial activities subsided, human activity and effects of habitat fragmentation would continue throughout the production phase and persist for the life of well or field. The consequences of these behavioral influences on migratory birds would vary according to species-specific response through time as modified by habituation or circumstance.

### 3.3.3 Special Status Animals

Affected Environment: There are no Endangered Species Act (ESA) listed or proposed species that inhabit or derive important benefit from the Project Area. Critical habitat for the razorback sucker, Colorado pikeminnow, bonytail chub and humpback chub is located downstream of the Project Area.

The general area provides habitat for greater sage-grouse, a BLM sensitive species and a candidate for ESA listing. The Project Area is located in preliminary priority habitat and is approximately 1.1 miles from the closest active lek.

Habitat for one additional BLM sensitive species, the Brewers's sparrow, occurs in the Project Area. Brewer's sparrows are a summer resident in Colorado and nest in sagebrush stands. Nests are constructed in sagebrush and other shrubs in denser patches of shrubs. This species would likely be nesting in the Project Area from mid-May through mid-July.

Environmental Consequences, Proposed Action:

Colorado River Fish

In May 2008, BLM prepared a Programmatic Biological Assessment (PBA) that addresses water depleting activities associated with BLM's fluid minerals program in the Colorado River Basin in Colorado. In response to BLM's PBA, the USFWS issued a Programmatic Biological Opinion (PBO) (ES/GJ-6-CO-08-F-0006) on December 19, 2008, which determined that BLM water depletions from the Colorado River Basin are not likely to jeopardize the continued existence of the Colorado pike minnow, humpback chub, bonytail, or razorback sucker, and that BLM water depletions are not likely to destroy or adversely modify designated critical habitat.

A Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin was initiated in January 1988. The Recovery Program serves as the reasonable and prudent alternative to avoid jeopardy and provide recovery to the endangered fishes by depletions from the Colorado River Basin. The PBO addresses water depletions associated with

fluid minerals development on BLM lands, including water used for well drilling, hydrostatic testing of pipelines, and dust abatement on roads. The PBO includes reasonable and prudent alternatives developed by the USFWS which allow BLM to authorize oil and gas wells that result in water depletion while avoiding the likelihood of jeopardy to the endangered fishes and avoiding destruction or adverse modification of their critical habitat. As a reasonable and prudent alternative in the PBO, USFWS authorized BLM to solicit a one-time contribution to the Recovery Implementation Program for Endangered Fish Species in the Upper Colorado River Basin (Recovery Program) in the amount equal to the average annual acre-feet depleted by fluid minerals activities on BLM lands.

# Greater Sage-grouse

Impacts to grouse species from oil and gas development are discussed in the LSFO RMP EIS. Impacts include, but are not limited to, displacement into less suitable habitat, nest abandonment, destruction of nests and loss of habitat. Other impacts, such as habitat fragmentation and the spread of weedy plants can also degrade habitat. Noise and increased human activity related to drilling can disrupt breeding and nesting activities. Recent research on sage-grouse suggest that reduced lek attendance, avoidance and displacement from areas of energy development, lower survival of nesting hens and reduced nest success can occur even under moderate levels of fluid minerals development (Holloran 2005, Doherty et al. 2008, Walker et al. 2007). These impacts do not only occur during the drilling phase, but continue during normal operations and maintenance of sites. Sage grouse may avoid otherwise suitable habitat as density of roads, powerlines or energy development increases (Lyon and Anderson 2003; Holloran 2005; Kaiser 2006; Doherty et al. 2008). Since the construction and drilling activities took place outside of the breeding and nesting seasons, impacts to greater sage-grouse were minimal.

# Brewer's Sparrow

Impacts to Brewer's sparrows are described in the Migratory Bird section of this EA.

Mitigation: None.

Environmental Consequences, No Action Alternative: Proposed Action has already occurred and impacts would be the same as proposed action.

Cumulative Effects: Cumulative impacts would be similar to those described in the Migratory Bird Section of this EA.

#### 3.3.4 Wildlife (Terrestrial)

Affected Environment: Native plant communities in the general area are comprised of sagebrush with an understory of grasses and forbs. These plant communities provide habitat for a variety of big game, small mammals, birds and reptiles. The proposed well site is located in elk and mule deer severe winter habitat and mule deer critical winter habitat.

Environmental Consequences, Proposed Action: Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Big game species are often restricted to smaller areas during the winter months and may expend high amounts of energy to move through snow, locate food and maintain body temperature. Disturbances during the winter can displace big game, depleting much needed energy reserves and may lead to decreased over winter survival.

Mule deer, pronghorn and elk using winter range are likely to be disturbed by noise and human activity associated with well pad construction and drilling. Since the proposed action occurred during the required timing limitation (December 1 to April 30), the aforementioned impacts likely occurred to these species.

Most small mammals, birds and reptiles using the Project Area would be capable of avoiding construction equipment and were not directly harmed by these activities. Some burrowing animals may have been killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigation: None.

Environmental Consequences, No Action Alternative: Proposed Action has already occurred and impacts would be the same as proposed action.

Cumulative Effects: Cumulative impacts would be similar to those described in the Migratory Bird Section of this EA.

# 3.4 HERITAGE RESOURCES AND HUMAN ENVIRONMENT

#### 3.4.1 Cultural Resources

Affected Environment: The approval of the APDs, construction of the well pad s, upgrading existing roads, constructing a new access roads, and installation of buried pipelines are considered undertakings under Section 106 of the National Historic Preservation Act (NHPA).

BLM has the legal responsibility to take into account the effects of its actions on cultural resources located on federal land. BLM Manual 8100 Series, the Colorado State Protocol (Protocol) and BLM Colorado Handbook of Guidelines and Procedures for Identification, Evaluation, and Mitigation of Cultural Resources provide guidance on how to accomplish Section 106 requirements with the appropriate cultural resource standards. Section 106 of NHPA requires federal agencies to: 1) inventory cultural resources to be affected by federal undertakings, 2) evaluate the importance of cultural resources by determining their eligibility to the National Register of Historic Places (National Register), and 3) consult with the federal and state preservation agencies regarding inventory results, National Register eligibility determinations, and proposed methods to avoid or mitigate impact to eligible sites (Historic

Properties). Within the state of Colorado, BLM's NHPA obligations are carried out under a Programmatic Agreement between BLM, the Advisory Council on Historic Preservation, and the State Historic Preservation Officer (SHPO). If the undertaking is determined to have "no effect" by the BLM Little Snake Field Office archaeologist then it may proceed under the terms of the Protocol. If the undertaking is determined to have "adverse effects" then consultation is initiated with the SHPO.

The prehistoric and historic cultural context for northwestern Colorado has been described in several recent regional contexts. Reed and Metcalf's (1999) context for the Northern Colorado River Basin is applicable for the prehistoric context and historical contexts include overviews compiled by Frederic J. Athearn (1982) and Michael B. Husband (1984). A historical archaeology context has also been prepared for the state of Colorado by Church and others (2007). In addition, significant cultural resources administered by the BLM-LSFO have been discussed in a Class 1 overview (McDonald and Metcalf 2006) and valuable contextual information is available in synthesis reports of archaeological investigations for a series of large pipelines in the area (Metcalf and Reed 2011; Rhode and others 2010; Reed and Metcalf 2009).

Environmental Consequences, Proposed Action: Cultural resources evaluated as eligible for the National Register can be directly or indirectly adversely impacted by surface disturbing activities and or the construction/modification of a building, structure, facility, or infrastructure. The proposed action also has the potential to detract from the integrity of any eligible cultural resources within the view-shed. Indirect adverse impacts to eligible cultural resources include but are not limited to collection of artifacts/cultural material, inadvertent trespass damaging integrity of cultural resources, and damage to the environmental setting.

The proposed well pad and access road has undergone a cultural resource study:

# Piontkowski, Michael

2012 Class III Cultural Resource Inventory for the existing McIntrye #1-3ST well location and access route (1700 feet) in Moffat County, Colorado for Axia Energy, Inc. Grand River Project Number 2012-76. BLM-LSFO#11.6.2012. OAHP#MF.LM.NR1258. Grand River Institute, Grand Junction, Colorado.

This study did not identify any archaeological or historical sites eligible for the National Register within the area of potential effect for the proposed undertaking. The proposed undertaking will have no effect on historic properties. It may proceed as described with the following standard mitigation measures in place.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Impacts: The cumulative impacts to cultural resources are broad and include impacts within the Project Area, adjacent to the Project Area, and within the viewshed of the Project Area. This are of the BLM-LSFO has not been subject to energy development in the past. Energy development has the potential to create vast amounts of surface disturbance from well pads, pipelined, facilities, and access roads. This infrastructure has the potential to detract from the integrity of cultural resources directly through physical disturbance or indirectly through the

degradation of the historical environmental setting. An increased utilization of the area also increases the change of illegal collection of cultural material. Alternatively, the development of the area will result in the execution of cultural resource studies. The information and data gained from these potential studies are valuable to the overall knowledge of the area and have the potential to aid in the mitigation of unknown adverse effects.

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#### Schiffer, Michael B.

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#### 3.4.2 Hazardous or Solid Wastes

Affected Environment: Air, water, soil, and biological resources may potentially be affected by an accidental release of hazardous materials during transportation to and from the Project Area, storage, and use in construction and operations. Sensitive areas for hazardous materials releases include areas adjacent to water bodies, above aquifers, and areas where humans or wildlife would be directly impacted.

The most pertinent of the Federal laws dealing with hazardous materials are as follows:

- The Oil Pollution Act (Public Law 101-380, August 18, 1990) prohibits discharge of pollutants into waters of the US, which by definition would include any tributary, including any dry wash that eventually connects with the Colorado River.
- The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended by the Superfund Amendments and Reauthorization Act of 1986 (42 U.S.C. 9601–9673), provides for liability, risk assessment, compensation, emergency response, and cleanup (including the cleanup of inactive sites) for hazardous substances. The act requires federal agencies to report sites where hazardous wastes are or have been stored, treated, or disposed of, and requires responsible parties, including federal agencies, to clean up releases of hazardous substances.
- The Resource Conservation and Recovery Act (RCRA), as amended by the Federal Facility Compliance Act of 1992 (42 U.S.C. 6901–6992), authorizes the EPA to manage, by regulation, hazardous wastes on active disposal operations. The act waives sovereign immunity for federal agencies with respect to all federal, State, and local solid and hazardous waste laws and regulations. Federal agencies are subject to civil and administrative penalties for violations and to cost assessments for the administration of the enforcement.
- The Emergency Planning and Community Right-To-Know Act of 1986 (42 U.S.C. 11001–11050) requires the private sector to inventory chemicals and chemical products, report those in excess of threshold planning quantities, inventory emergency response equipment, provide annual reports and support to local and State emergency response organizations, and maintain a liaison with the local and State emergency response organizations and the public.

Environmental Consequences, Proposed Action: The project would fall under environmental regulations that impact disposal practices and impose responsibility and liability for protection of human health and the environment from harmful waste management practices or discharges. The direct impact would be if a solid waste or hazardous material is discarded and contaminates land surface either by solid, semi-solid, liquid, or contained gaseous material. Hazardous, civil, and criminal penalties may be imposed if the waste is not managed in a safe manner, and according to EPA regulations.

Mitigation: These laws, regulations, standard lease stipulations, and contingency plans and emergency response resources are expected to adequately mitigate any potential hazardous or solid waste issues associated with the Proposed Action.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore the impacts would be the same as Proposed Action.

Cumulative Effects: Historic and continued energy development in the area would not likely have an additive effect on the amount of solid or hazardous waste introduced in the environment if laws and regulations are followed and enforced.

# 3.4.3 Native American Religious Concerns

Affected Environment: Four Native American tribes have cultural and historical ties to lands have administered by the BLM-LSFO. These tribes include the Eastern Shoshone Tribe, Ute Mountain Ute Tribe, Uinta and Ouray Agency Ute Indian Tribe, and the Southern Ute Indian Tribe.

American Indian religious concerns are legislatively considered under several acts and Executive Orders, namely the American Indian Religious Freedom Act, the Native American Graves Environmental Assessment Protection and Repatriation Act, and Executive Order 13007 (Indian Sacred Sites). In summary, these require, in concert with other provisions such as those found in the NHPA and Archaeological Resources Protection Act, that the federal government carefully and proactively take into consideration traditional and religious Native American culture and life and ensure, to the degree possible, that access to sacred sites, the treatment of human remains, the possession of sacred items, the conduct of traditional religious practices, and the preservation of important cultural properties are considered and not unduly infringed upon. In some cases, these concerns are directly related to "historic properties" and "archaeological resources". In some cases elements of the landscape without archaeological or other human material remains may be involved. Identification of these concerns is normally completed during the land use planning efforts, reference to existing studies, or via direct consultation.

Consultation for the type of proposed undertaking is consulted on annually with the tribes. Letters were sent to the tribes in the spring of 2012 describing general oil and gas development within the BLM-LSFO. No comments were received. The location of any specific APD, service pipelines, and access roads are generally not consulted with the tribes unless they rise to a level that warrants specific consultation.

Environmental Consequences, Proposed Action: Cultural items, sites, or landscapes determined to by culturally significant to the tribes can be directly or indirectly adversely impacted by oil and gas development. Direct impacts could include but are not limited to physical damage, removal of cultural objects or items, and activities thought to be disrespectful. Indirect impacts include but are not limited to prevention of access (hindering the performance of traditional ceremonies and rituals), increased visitation of a previously little used area, and loss of integrity related to religious feelings and associations.

There are no known cultural items, sites, or landscapes determined to be culturally significant to the tribes within and near the undertaking area. The proposed action does not prevent access to any known sacred sites, prevent the possession of sacred objects, or interfere or otherwise hinder the performance of traditional ceremonies and rituals.

Mitigation: There are no known adverse impacts to any cultural items, sites, or landscaped determined to by culturally significant to the tribes. If new information is provided by Native Americans, additional or edited terms and conditions for mitigation may have to be negotiated or enforced to protect resource values.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Impacts: Continued energy development in the area has an additive effect of changing the landscape from that ancestrally known by the tribes. There are no specific sites of concern identified in the Project Area, it is rather the broader continued change that modern culture brings to the landscape.

# 3.4.4 Paleontological Resources

Affected Environment: The geologic formation at the surface is the <u>Cretaceous Age Fort Union Formation (Tf)</u>. This formation has been classified a PFYC 3 formation for the potential for occurrence of scientifically significant fossils. Scientifically significant fossils are occasionally found within this formation. The potential for discovery of significant fossils on this location is considered to be moderate.

Environmental Consequences, Proposed Action: If any such fossils are located here, construction activities could damage the fossils and the information that could have been gained from them would be lost. The significance of this impact would depend upon the significance of the fossil.

Environmental Consequences, No Action Alternative: The action has already occurred and therefore, the impacts would be the same as Proposed Action.

Cumulative Impacts: The cumulative impacts to the moderate potential for significant fossil discovery are broad within the Project Area and adjacent to the Project Area. Moffat County has been the location of energy development for over 50 years. This activity has created a vast amount of surface disturbance including well pads, pipelined, facilities, and access roads. To date, there have been fossil discoveries recorded. Continued activity could prove additional discoveries.

Mitigation: If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed time frame. Operations will resume only upon written notification by the Authorized Officer.

#### References:

Armstrong, Harley J. and Wolney, David G., 1989, Paleontological Resources of Northwest Colorado: A Regional Analysis, Museum of Western Colorado, Grand Junction, CO, prepared for Bur. Land Management, Vol. I of V.

# CHAPTER 4– PUBLIC LAND HEALTH STANDARDS DETERMINATION 4.1 INTRODUCTION

In January 1997, Colorado BLM approved the Standards for Public Land Health. The five standards cover upland soils, riparian systems, plant and animal communities, threatened and endangered species, and water quality. Standards describe conditions needed to sustain public land health and relate to all uses of the public lands. Environmental analyses of proposed projects on BLM land must address whether the Proposed Action or alternatives being analyzed would result in impacts that would maintain, improve, or deteriorate land health conditions identified in the applicable Land Health Assessment (LHA).

# 4.2 COLORADO PUBLIC LAND HEALTH STANDARDS

The Proposed Action is located on private surface and therefore these standards do not apply.

# CHAPTER 5- COORDINATION AND CONSULTATION

**PERSONS/AGENCIES CONSULTED:** BLM-LSFO performs annual consultation with the following tribes: the Eastern Shoshone, Ute Mountain Ute, Uinta and Ouray Agency Ute, and the Southern Ute. Letters were sent to the tribes in the spring of 2012 describing general oil and gas development projects. No comments were received. Project-specific consultation is typically not conducted unless activities are proposed within a previously identified area of tribal concern or if an undertaking may involve culturally significant items, sites and/or landscapes.

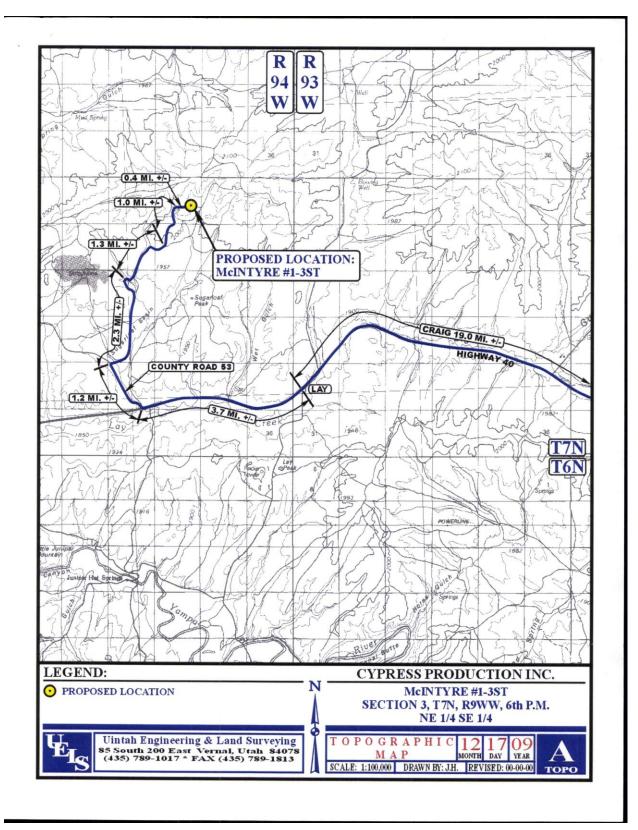
**SIGNATURE OF PREPARER:** Shawn Wiser /s/

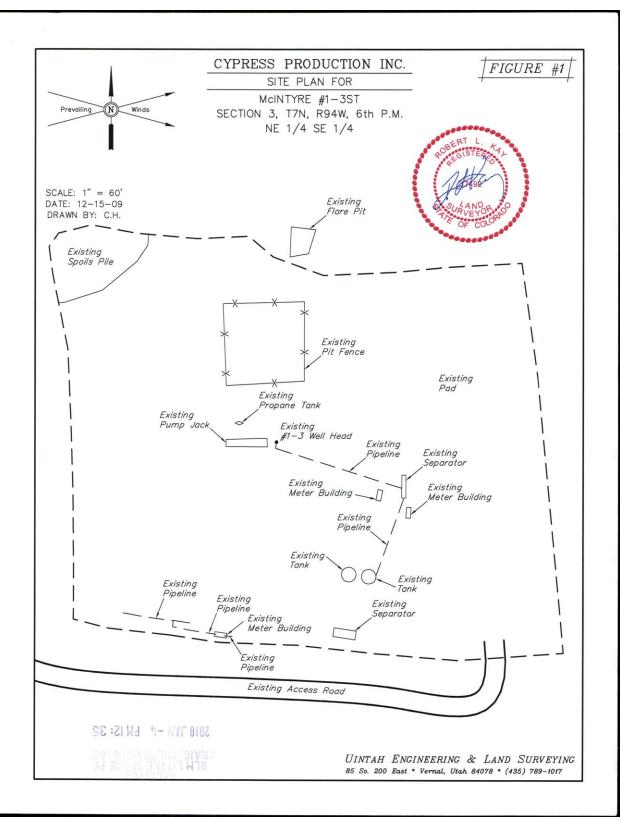
**DATE SIGNED:** 03/21/12

**SIGNATURE OF ENVIRONMENTAL REVIEWER:** Kathy McKinstry

**DATE SIGNED: 3/22/13** 

**Attachments:** Proponent provided maps and plats





# ADVISORY NARRATIVES AND CONDITIONS OF APPROVAL APPLICATION FOR PERMIT TO DRILL

All lease and/or unit operations are to be conducted in such a manner to ensure full compliance with the applicable laws, regulations (43 CFR Part 3160), Onshore Oil and Gas Orders No. 1, 2, 3, 4, 5, 6 and 7, Notice to Lessees, and the approved plan of operations. Approval of this application does not relieve you of your responsibility to obtain other required federal, state, or local permits. A copy of the approved Form 3160-3 and the pertinent drilling plan, along with any advisory narratives and conditions of approval, shall be available at the drillsite to authorized representatives at all times. The operator is considered fully responsible for the actions of his subcontractors.

Your review and appeal rights are contained in 43 CFR 3165.3 and 3165.4.

# **ACTIONS REQUIRING BLM NOTIFICATION**

48-Hours notification prior to Construction and/or Reclamation.

Oral Spud notices at least 24-hours after spudding, followed with a Sundry Notice within 5 working days.

For **WILDCAT wells**, a daily log of drilling activities shall be submitted to the BLM on a **daily** basis. For other wells, this report shall be submitted at the request of the Authorizing Officer.

Well Completion Reports must be submitted within 30-days of completion of the well or after completion of operations being performed.

For running casing, cementing, BOPE tests, drill stem tests or other notices, submit 24-hours in advance of commencing operations AND call the following number and leave voice message with call back number.

(970) 826-5093 (voice mail)

# STANDARD CONDITIONS

- 1. The Little Snake Field Office will be given 48-hour notification prior to commencing construction and/or reclamation work. Contact the Little Snake Field Office (970) 826-5000 to report work, which will commence.
- 2. Notify Little Snake Field Office at (970) 826-5000 12 to 24-hours in advance to witness running and cementing of surface casing and testing of the BOPE. Also notify the Little Snake Field Office 24-hours in advance of beginning well completion operations.
- 3. The notice of spud will be reported orally to the Little Snake Field Office (970) 826-5000 at least **24** hours after spudding. This notice shall include spud date, time, details of spud (hole, casing, cement, etc.), API well number, and date the rotary rig was moved on location. If the spudding occurs on a weekend or holiday, wait until the following regular workday to make this report. The oral notice shall be followed by written notification within 5 working days.
- 4. The APDs contain geologic downhole reports that require the operator to isolate and protect all fresh to moderately saline water (TDS < 10,000 PPM) encountered during drilling, from communication and contamination with other fluids. The operator is required to submit a report showing the depth and analysis of all groundwater encountered during drilling.
- 5. Two copies of all electric and other logs for the well as per 43 CFR 3162.4-1(b) shall be submitted on DVD/CD rather than hard copy, *except* for the Cement Bond Log which shall be provided *both* electronically and a hard copy.
- 6. This permit does not relieve the proponent from the requirement to obtain other required local, state, and federal permits.
- 7. No hazardous materials, hazardous wastes, or trash will be disposed of on public lands or on private surface overlying the oil and gas lease. If a release does occur, it will be reported to the Little Snake Field Office immediately at (970) 826-5000.
- 8. All survey stakes representing the leveled drill pad, the crest of excavations, the toe of embankments, the reserve pit, and the access road will be in place prior to construction. Staking shall include the well location,

two 200-foot directional reference stakes, the exterior dimensions of the drill pad, reserve pit and other areas of surface disturbance, cuts and fills, and centerline flagging of new roads with road flagging being visible from one to the next.

- 9. Provide the Authorized Officer with Geographic Information System (GIS) data to accurately locate and identify the well pad, access road, pipeline and all constructed infrastructure (as-built) within 60 days of construction completion. Acceptable data formats are: (1) corrected global positioning system (GPS) files with sub-meter accuracy or better or, (2) ESRI shapefiles or geodatabases. Option 2 is preferred. Data must be submitted in NAD83. Data may be submitted as: (1) an email attachment: or (2) on a standard CD in compressed or uncompressed format. All data shall include metadata, for each submitted layer, that conforms to the Content Standards for Digital Geospatial Metadata from the Federal Geographic Data Committee standards.
- 10. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved in advance.
- 11. Any cultural and/or paleontological (fossil) resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and the authorized officer will make any decision as to proper mitigation measures after consulting with the holder.
- 12. If fossils are discovered during construction or other operations, all activity in the area will cease and the Field Office Manager will be notified immediately. An assessment of significance will be made within an agreed timeframe. Operations will resume only upon written notification by the Authorized Officer.
- 13. STANDARD CULTURAL STIPULATION: If cultural or paleontological resources are discovered during exploration operations under this license, the licensee shall immediately notify the Field Officer Manager and shall not disturb such discovered resources until the Field Officer Manager issues specific instructions.
  - a. Within 5 working days after notification, the Field Office Manager shall evaluate any cultural resources discovered and shall determine whether any action may be required to protect or to preserve such discoveries.
  - b. The cost of data recovery for cultural resources discovered during exploration operations shall be borne by the licensee, if the licensee is ordered to take any protective measures. Ownership of cultural resources discovered shall be determined in accordance with applicable law.
  - c. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the Authorized Officer (970) 826-5087. Within five working days the Authorized Officer will inform the operator as to:
    - 1. Whether the materials appear eligible for the National Register of Historic Places;
    - 2. The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again and,
  - d. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the Authorized Officer will assume responsibility for whatever recordation, and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The Authorized Officer will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the Authorized Officer that the required mitigation has been completed, the operator will then be allowed to resume construction.
  - e. Pursuant to 43 CFR 10.4(g) (Federal Register Notice: Monday December 4, 1995, Vol 60, No. 232) the holder of this authorization must notify the Authorized Officer, by telephone (970) 826-5087, with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity

of the discovery and protect it for 30 days or until notified to proceed by the Authorized Officer.

14. VEGETATION CLEARING: Vegetation removal and the degree of surface disturbance will be minimized wherever possible.

[Example of site-specific requirement: During vegetation clearing activities, trees and woody vegetation removed from the well pad and access road will be moved aside prior to any soil disturbing activities. Care will be taken to avoid mixing soil with the trees and woody vegetation. Trees left for wood gathering will be cut (twelve inches or less from the ground), delimbed, and the trunks, six (6) inches or more in diameter will be removed and placed either by the uphill side of the access road, or moved to the end of the road, or to a road junction for easy access for wood gatherers and to reduce vehicle traffic on the well pad. Trees with a trunk diameter less than six (6) inches and woody vegetation will be used to trap sediment, slow runoff, or scattered on reclaimed areas to stabilize slopes, control erosion, and improve visual resources.]

Retaining as much vegetative cover as possible during the project and/or reclaiming and covering disturbed areas shortly following excavation should help keep localized dust down during dry periods. Dust control measures, as approved by the BLM, will be applied as appropriate.

#### 15. TOPSOIL MANAGEMENT:

The top six (6) inches of soil material will be stripped and stockpiled around the perimeter of the well location to control run-on and run-off, and to make redistribution of topsoil more efficient during interim reclamation. The stockpiled soil will be reasonably free of brush and tree parts. Topsoil will be clearly segregated from excess spoil material.

- Earthwork for interim and final reclamation must be completed within 6 months of well completion or plugging (weather permitting).
- Salvaging and spreading topsoil will not be performed when the ground or topsoil is frozen or too wet to adequately support construction equipment. If such equipment creates ruts in excess of four (4) inches deep, the soil will be deemed too wet.
- No major depressions will be left that would trap water and cause ponding.
- When saturated soil conditions exist on or along the right-of-way, construction shall be halted until soil material dries out sufficiently for construction to proceed without undue damage and erosion to the right-of way.
- The operator shall provide satisfactory reclamation of all sites disturbed by their activity. This may include installation of additional erosion control devices and seeding at the discretion of the BLM Authorized Officer.
- Topsoil shall be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation. Topsoil shall only be used for reclamation and shall not be used to bed or pad the pipe during backfilling.
- To control erosion and sediment transport, roads shall be crowned or sloped, ditched, surfaced, drained with culverts and/or water dips, and constructed to BLM Gold Book standards or to engineered design if fragile soil properties exist. Culvert outlets shall incorporate controls such as rip-rap, sediment catchments, and anchored straw bales, to slow water velocity and prevent erosion and soil transport.
- The operator shall provide timely year-round road maintenance and cleanup on roads. A regular schedule for maintenance shall include, but not be limited to, crown or slope reconstruction, blading, ditch, culvert and catchment cleaning, road surface replacement, and dust abatement. When rutting within the traveled way becomes greater than three inches, blading, and/or gravelling shall be conducted as approved by the BLM Authorized Officer.
- Top soil segregation will not occur when soils are saturated or frozen unless special authorization is granted by the BLM Authorized Officer.
- All erosion and sediment control practices and measures shall be constructed, applied, and maintained in accordance with the approved erosion and sediment control plan.
- Topsoil stripping shall be confined to the immediate construction areas. A 4 to 6-inch stripping depth is common, but depth may vary depending on the particular soil. All perimeter dikes, basins, and other sediment controls shall be in place prior to stripping.
- Topsoil shall not be placed while in a frozen or muddy condition, when the subgrade is excessively wet, or in a condition that may otherwise be detrimental to proper grading or proposed sodding or seeding.

- 16. SEEDING: Seedbed Preparation. Initial seedbed preparation will consist of backfilling, leveling, and ripping all compacted areas to be seeded to a minimum depth of 18 inches with a minimum furrow spacing of 2 feet, followed by recontouring the surface and then evenly spreading the stockpiled topsoil. Prior to seeding, the seedbed will be scarified and left with a rough surface.
  - Final seedbed preparation will consist of contour cultivating to a depth of 4 to 6 inches within 24-hours prior to seeding.
  - Seed Application. Seeding will be conducted no more than 24 hours following completion of final seedbed preparation.
  - The application rate shown in the table is based on 45 pure live seeds (PLS) per square foot, drillseeded to a depth of 0.25 to 0.5 inch. (However, brush species will be seeded during the winter on the ground surface or preferably on top of snow.) In areas that will not be drill-seeded, the seed mix will be broadcast-seeded at twice the application rate shown in the table and covered 0.25 to 0.5 inch deep with a harrow or drag bar or will be broadcast-seeded into imprints, such as fresh dozer cleat marks.
  - No seeding will occur from May 15 to September 15. Fall seeding is preferred and will be conducted after September 15 and prior to ground freezing. Spring seeding will be conducted after the frost leaves the ground and no later than May 15.
- 17. EROSION CONTROL & MULCHING: Mulch, silt fencing, wattles, hay bales, and other erosion control devices will be used on areas at risk of soil movement from wind and water erosion.
  - Mulch will be used if necessary to control erosion, create vegetation micro-sites, and retain soil moisture and may include hay, small-grain straw, wood fiber, live mulch, cotton, jute, or synthetic netting. Mulch will be free from mold, fungi, and certified free of noxious or invasive weed seeds.
  - Straw mulch will contain fibers long enough to facilitate crimping and provide the greatest cover.
- 18. MANAGEMENT OF INVASIVE, NOXIOUS, AND NON-NATIVE SPECIES: All reclamation equipment will be cleaned prior to use to reduce the potential for introduction of noxious weeds or other undesirable non-native species.
  - An intensive weed monitoring and control program will be implemented beginning the first growing season after interim and final reclamation.
  - Monitoring will be conducted at least annually during the growing season to determine the presence of any State-listed noxious weeds. Noxious weeds that have been identified during monitoring will be promptly treated and controlled. A Pesticide Use Proposal (PUP) will be submitted to BLM for approval prior to the use of herbicides.
- 19. The cuttings pit will be designed to exclude runoff water and maintain a 2-foot freeboard between the maximum fluid level and the lowest point of containment. The cuttings pit will not be used for disposal of any materials or fluids, except for materials or fluids specifically addressed in the drilling program or having a subsurface origin. If oil or oily substance is in the cuttings pit, it must be removed within 30 days after the drilling rig is removed. Netting will be installed if oily substance is present in the cuttings pit.
- 20. Drainage for runoff water will be provided to divert runoff water away from the cuttings pit, cut portions of the well location and the topsoil stockpile. Runoff water that concentrates and forms channels on the well location will be diverted and/or dispersed to prevent erosion of the fill slopes. Any ditches designed to provide runoff drainage will be constructed on a minimal grade and will release water onto undisturbed ground without causing accelerated erosion. The operator will take additional measures if erosion is occurring within the runoff water drainage system.
- 21. The perimeter of the reserve pit and production pits, if any, will be fenced with woven wire with 2 strands of barbed wire, properly spaced, on the top and all held in place by side posts and corner H-braces to inhibit entry by livestock and wildlife. The fence will be maintained until backfilling or removal of facilities occurs.
- 22. In the event downhole operations threaten to exceed the required 2-foot freeboard, regarding reserve pit fluids, immediate notification will be provided to the Authorized Officer with concurrent steps taken to minimize the introduction of additional fluids, until alternative containment methods can be approved.

- 23. Cuttings pits must be free of fluids and backfilled within 6 months of well completion. Pits remaining open after 6 months will require written authorization of the Authorized Officer. Immediately upon well completion, any hydrocarbons or trash in the pit will be removed. On multi well pads cuttings pits must be free of fluids and backfilled within 6 months of the last well completed on the pad. The method of disposal for cuttings pit fluids must be approved by the BLM AO. Pits will be allowed to dry, be pumped dry, or solidified in-situ prior to backfilling. The backfilling of the cuttings pit will be completed within 30 days after dry conditions exist and will meet the following minimum requirements:
  - a. Following completion activities, pit liners will be removed and disposed of at an approved landfill.
  - b. Backfilling will be done in such a manner that the mud and associated solids will be confined to the pit and not squeezed out and incorporated in the surface materials.
  - c. There will be a minimum of 5 feet of cover (overburden) on the pit. In relatively flat areas the pit area will be slightly mounded to allow for settling and to promote surface drainage away from the backfilled pit.
  - d. When the work is completed, the pit areas will support the weight of heavy equipment without sinking and over time shall not subside over 6-inch depth.
- 24. In the event production is established, all land surfaces that are to remain free of vegetation (roads and well location) will be monitored for and protected from wind erosion; dry powdery soil will be treated to minimize wind erosion. The unused disturbed areas surrounding the well location will be re-contoured to appropriate confirmation as soon as possible. Some or all of the stockpiled topsoil will be evenly distributed over these recontoured areas. Brush cleared prior to construction of the well site shall be scattered back over the recontoured area.
- 25. Prior approval is required to remove reserve pit fluids from the reserve pit; a request of this type will need to include the destination of the fluids and if the destination is not a State approved facility, the request will include State approval of the destination.
- 26. All pits, cellars, rat holes and other bore holes unnecessary for further lease operations, excluding the reserve pit, will be backfilled immediately after the drilling rig is released. Pits, cellars and/or bore holes that remain on location must be fenced as specified for the reserve pit in the applicant's Surface Use Plan.
- 27. If installed, production facilities will be located on cut portions of the existing drill pad.
- 28. In the event a producing well is established, all new production equipment which has open-vent exhaust systems, such as heater treaters, separators, dehydration units, and flare stacks, shall be designed and constructed to prevent birds and bats from entering or nesting in or on such units, and to the extent practical, to discourage birds from perching on the exhaust stacks.
- 29. A containment berm must be installed around all storage tanks, including temporary tanks. Compaction and construction of the berm surrounding the tank or tank battery will be designed to prevent lateral movement of fluids through the utilized materials, prior to storage of fluids. The berm must be constructed to contain at minimum 110 percent of the storage capacity of the largest tank within the berm. All loading lines will be placed inside the berm.
- 30. All production facilities installed on location that have the potential to leak or spill oil, glycol, produced water, or other fluid, which may constitute a hazard to public health or safety, shall be placed within an appropriate secondary containment or diversionary structure. The structure shall hold 110% of the capacity the largest single tank in use and be impervious to any oil, glycol, produced water, or other toxic fluid for 72 hours. It shall be installed so that any spill or leakage would not drain, infiltrate, or otherwise escape to ground water, surface water, or navigable waters before cleanup is completed.
- 31. Install raptor perch deterrents on equipment, fences, cross arms and pole tops.
- 32. To prevent long term impacts associated with noise, sound producing equipment (such as compressors or pump jacks) must be equipped with a hospital grade muffler or similar device which limits sound emissions to 49 decibels or less measured 30 feet from the source. Mufflers will be pointed upward to dissipate potential vibration.

#### 33. INTERIM RECLAMATION PRODEDURES:

#### **Recontouring:**

- The portions of the cleared well site not needed for operational and safety purposes will be recontoured to the original contour or to an interim contour that blends with the surrounding topography as much as possible. Sufficient level area will remain for setup of a workover rig and to park equipment. In some cases, rig anchors may need to be pulled and reset after recontouring to allow for maximum interim reclamation.
- If the well is a producer, the final cut and fill slopes prior to re-seeding will not be steeper than a 3:1 ratio, unless the adjacent native topography is steeper. Note: Construction slopes may be much steeper during drilling, but will be recontoured to the above ratios during interim reclamation.
- Roads and well production equipment, such as tanks, treaters, separators, vents, electrical boxes, and equipment associated with pipeline operation, will be placed on location so as to permit maximum interim reclamation of disturbed areas. If equipment is found to interfere with the proper interim reclamation of disturbed areas, the equipment will be moved so proper recontouring and revegetation can occur.

# **Application of Topsoil and Revegetation:**

- Topsoil will be evenly respread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including road cuts and fills and to within a few feet of the production facilities, unless an all-weather, surfaced, access route or small "teardrop" turnaround is needed on the well pad.
- In order to inspect and operate the well or complete workover operations, it may be necessary to drive, park, and operate equipment on restored, interim vegetation within the previously disturbed area. Damage to soils and interim vegetation will be repaired and reclaimed following use. To prevent soil compaction, under some situations, such as the presence of moist, clay soils, the vegetation and topsoil will be removed prior to workover operations and restored and reclaimed following workover operations.

#### **Visual Resources Mitigation:**

- Oil and gas operations will be subject to the range of mitigation practices noted on the BLM visual resource management (VRM) website: http://www.blm.gov/nstc/VRM/.
- Trees and vegetation will be left along the edges of the pads to provide screening.
- To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, debris, and rock over recontoured cut and fill slopes.
- To reduce the view of production facilities from visibility corridors and private residences, facilities will not be placed in visually exposed locations (such as ridgelines and hilltops).
- Production facilities will be clustered and placed away from cut slopes and fill slopes to allow the maximum recontouring of cut and fill slopes.
- All long-term above ground structures will be painted an appropriate color from the BLM "Supplemental Environmental Colors" chart to blend with the natural color of the landscape background.
- Visually mitigate all surface disturbance activity back to the integrity of the VRI scenic quality rating.

# 34. FINAL RECLAMATION PRODEDURES:

- Final reclamation actions will be completed within 6 months of well plugging.
- All disturbed areas, including roads, pipelines, pads, production facilities, and interim reclaimed areas will be recontoured to the contour existing prior to initial construction or a contour that blends indistinguishably with the surrounding landscape. Resalvaged topsoil will be respread evenly over the entire disturbed site to ensure successful revegetation. To help mitigate the contrast of recontoured slopes, reclamation will include measures to feather cleared lines of vegetation and to save and redistribute cleared trees, woody debris, and large rocks over recontoured cut and fill slopes.
- Water breaks and terracing of the site will only be installed when absolutely necessary to prevent erosion of fill material. Water breaks and terracing are not permanent features and will be removed and reseeded when the rest of the site is successfully revegetated and stabilized.
- If necessary to ensure timely revegetation, the pad will be fenced to BLM standards to exclude livestock grazing for the first two growing seasons or until seeded species become firmly established, whichever comes later. Fencing will meet standards found on page 18 of the Gold Book, 4th Edition, or will be fenced with operational electric fencing.

• Final abandonment of pipelines and flow lines will involve flushing and properly disposing of any fluids in the lines. All surface lines and any lines that are buried close to the surface that may become exposed in the foreseeable future due to water or wind erosion, soil movement, or anticipated subsequent use, must be removed. Deeply buried lines may remain in place unless otherwise directed by the authorized officer.

#### **Monitoring and Final Abandonment Approval**

- Reclaimed areas will be monitored annually. Actions will be taken to ensure that reclamation standards are met as quickly as reasonably practical.
- Reclamation monitoring will be documented in an annual reclamation report submitted to the Authorized Officer by December 31. The report will document compliance with all aspects of the reclamation objectives and standards, identify whether the reclamation objectives and standards are likely to be achieved in the near future without additional actions, and identify actions that have been or will be taken to meet the objectives and standards. The report will also include acreage figures for Initial Disturbed Acres, Successful Interim Reclaimed Acres, and Successful Final Reclaimed Acres. Annual reports will not be submitted for sites approved by the Authorized Officer in writing as having met interim or final reclamation standards. Any time 30 percent or more of a reclaimed area is redisturbed, monitoring will be reinitiated. The Authorized Officer will be informed when reclamation has been completed, is successful, and the site is ready for final inspection.

#### 35. RECLAMATION PERFORMANCE STANDARDS:

#### **Interim Reclamation Standard:**

Disturbed areas not needed for long-term production operations or vehicle travel have been recontoured, protected from erosion, and revegetated with a self-sustaining, vigorous, diverse, native (or otherwise approved) plant community sufficient to minimize visual impacts, provide forage, stabilize soils, and impede the invasion of noxious weeds.

#### **Final Reclamation Standard:**

The original landform has been restored for all disturbed areas including well pads, production facilities, roads, pipelines, and utility corridors.

- A self-sustaining, vigorous, diverse, native (or otherwise approved) plant community is established on the site, with a density sufficient to control erosion and non-native plant invasion and can reestablish wildlife habitat or forage production. At a minimum, the established plant community will consist of species included in the seed mix and/or desirable species occurring in the surrounding natural vegetation. No single species will account for more than 30 percent total vegetative composition unless it is evident at higher levels in the adjacent landscape. Permanent vegetative cover will be determined successful when the basal cover of desirable perennial species is at least 80 percent of the basal cover of the adjacent undisturbed area. Plants must be resilient as evidenced by well-developed root systems and flowers. Shrubs must be well established and in a "young" age class at a minimum (therefore, not comprised mainly of seedlings that may not survive until the following year).
- In agricultural areas, irrigation systems and soil conditions are reestablished in such a way as to ensure successful cultivation and harvesting of crops.
- Erosion features are equal to or less than surrounding area and erosion control is sufficient so that water naturally infiltrates into the soil and gullying, headcutting, slumping, and deep or excessive rilling (greater than 3 inches) is not observed.
- The site is free of State- or county-listed noxious weeds, oil field debris and equipment, and contaminated soil. [Example of site-specific requirement: Given that cheatgrass is common in portions of the Project Area, it may not be possible to totally eliminate this invasive species from the reclaimed area. In the case of cheatgrass, interim reclamation will be considered acceptable if cheatgrass and other undesirable vegetation are less than five percent cover, if the adjacent vegetation is less than 50 percent undesirables. Cheatgrass will be less than 50 percent cover if the adjacent vegetation is more than 50 percent undesirable species.]
- The final inspection for final reclamation success and approval for final abandonment will be subject to an interdisciplinary review. An interdisciplinary team consisting of, at a minimum, a wildlife biologist, a

rangeland management specialist, and a natural resources specialist will evaluate the reclamation against the performance standards and provide the authorized officer with a recommendation as to whether or not objectives have been met.

#### REGULATORY REMINDERS

- A. This permit is valid for a period of two years from the date of approval. Any requests for extensions must be submitted prior to the end of the two-year period. If the permit terminates, any surface disturbance created under the permit must be rehabilitated in accordance with the approved plan within 90 days of termination, unless otherwise approved by the Authorized Officer. An expired permit may be reinstated at the Authorized Officer's discretion; however, future operations may require a new application be filed for approval.
- B. All drilling operations, unless otherwise specifically approved in the APD, must be conducted in accordance with Onshore Oil and Gas Order No. 2; Drilling Operations.
- C. All 10-Day Requirement responses are made part of this APD.
- D. There shall be no deviation from the proposed drilling and/or workover program as approved, without prior approval from the Little Snake Field Office. Safe drilling and operating practices must be observed.
- E. Approval of this application does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease, which would entitle the applicant to conduct operations thereon.
- F. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the Little Snake Field Office. If operations are to be suspended for more than 30 days, prior approval for certain well operations must be obtained and notification given before resumption of operations in accordance with 43 CFR 3162.3-2 and 3162.3-4.
- G. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval for subsurface abandonment operations may be granted by the Little Snake Field Office. Oral approvals must be confirmed in writing (Notice of Intention to Abandon (Form 3160-5)) within 15 days. Unless the plugging is to take place immediately upon receipt of oral approval, the appropriate resource area must be notified at least 48 hours in advance of the plugging of the well, in order to provide a representative the opportunity to witness plugging operations.
- H. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) must be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with Onshore Oil and Gas Order No. 1. Daily drilling reports, a copy of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations (with Form 3160-4) will be filed and sent to the Little Snake Field Office, 455 Emerson Street, Craig, Colorado 81625. Samples (cuttings, fluid, and/or gas) will be submitted only when requested by the Authorized Officer.
- I. Section 102 (b) (3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1 (c), requires that "not later than the fifth business day after any well begins production on which royalty is due anywhere on a least site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, or the date on which such production has begun or resumed."

The date on which a well commences production, or resumes production after having been off production for more than 90 days is to be construed as follows:

- 1. For an oil well, the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank or the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever occurs first;
- 2. For a gas well, that date on which gas is first measured through sales metering facilities or the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, whichever occurs

first. For purposes of this provision, a gas well shall not be considered to have been off production unless it is incapable of production.

If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c) (3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3163.2(e) (2).

- J. This APD is approved subject to the requirement that, should the well be successful (completed for production or recompleted for production in a new interval), the Little Snake Field Office must be notified when it is placed in a producing status. Such notification may be provided orally if confirmed in writing, and must be received in the Little Snake Field Office by not later than the 5<sup>th</sup> business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following information items:
- 1. Operator name
- 2. Well name, number, and location
- 3. Date well was placed on production
- 4. The lease, or communitized tract, or unit participating area to which the well's production is attributable.
- K. A separate Monthly Report of Operations, Form 3160-6, shall be submitted for each lease, unit participating area, or communitization agreement, beginning with the month in which drilling operation commence, in accordance with 43 CFR 3162.4-3. This report shall be sent to Minerals Management Service, Production Accounting Division, P.O. Box 17110, Denver, Colorado 80217.
- L. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligation determined by the Authorized Officer.
- M. All produced liquids must be contained, including the dehydrator vent/condensate line effluent. All production pits must be bermed and fenced.
- N. Gas produced from this well may not be vented or flared beyond an initial, authorized test period of 30 days or 50 MMCF following completion, whichever comes first, without the prior written approval of the authorized officer. Should gas be vented of flared without approval beyond the authorized test period, you may be directed to shut the well in until the gas can be captured or approval to continue venting or flaring is granted and you may be required to compensated the lessor for that portion of the gas that was vented or flared without approval which is determined to have been avoidably lost.
- O. Produced water from newly completed wells may be temporarily disposed of into the reserve pit for a period of up to 90 days. During the 90-day periods, an application for approval of a permanent disposal method and location will be submitted according to Onshore Order No. 7 for approval.
- P. If an Electronic Flow Computer (EFC) on a differential-type flow meter for gas measurement is used, the operator will follow the standards and requirements of Notice to Lessees (LTL-2007-1). This NTL does not alter the standards and requirements of Onshore Order No. 5, applicable variances, or NTLs which address the primary device.
- Q. All occurrences of useable water at depths encountered, shall be reported to the Little Snake Field Office with the Well Completion Report.
- R. A schematic facilities diagram as required by CFR 43, Part 3162.7-5, shall be submitted to the Little Snake Field Office within 60 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 3162.7-5(b).
- S. The permit holder is required to use certified weed free hay, straw and mulch on BLM lands in Colorado should the use or storage of hay, straw or mulch be necessary. Any person who knowingly and willfully violates this regulation may be subject to a fine of not more than \$1,000 or imprisonment of not more than 12 months, or both as defined in 43 USC 1733 (a).

### FINDING OF NO SIGNIFICANT IMPACT (FONSI)

DOI-BLM-CO-N010-2012-0044-EA

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major federal action that would adversely impact the quality of the human environment. This determination is based on the following factors:

- 1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
- 2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
- 3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas or designated Areas of Critical Environmental Concern.
- 4. There are no highly controversial effects on the environment.
- 5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
- 6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State or local natural resource related plans, policies or programs.
- 7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
- 8. Based on previous and ongoing cultural surveys and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.
- 9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

#### FINDING OF NO SIGNIFICANT IMPACT (FONSI)

# DOI-BLM-CO-N010- 2012-0044-EA

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

I have reviewed the direct, indirect and cumulative effects of the proposed activities documented in the McIntyre Well # 1-3 ST EA No. DOI-BLM-N010-2012-0044-EA. I have also reviewed the project record for this analysis and the impacts of the proposed action and alternatives as disclosed in the Alternatives and Environmental Impacts sections of the EA. Based upon a review of the EA and the supporting documents, I have determined that the project is not a major federal action and will not significantly affect the quality of the human environment, individually or cumulatively with other actions in the general area. Because there would not be any significant impact, an environmental impact statement is not required.

#### SIGNATURE OF AUTHORIZED OFFICIAL:

/s/ Timothy Wilson
Wendy Reynolds, Field Manager

**DATE SIGNED:** 03/27/13

# **Decision Record (O&G)**

DOI-BLM-CO-N010- 2012-0044-EA

#### **DECISION AND RATIONALE:**

I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. The project will be monitored as stated in the Compliance Plan outlined below.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD 12-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC74920, McIntyre Well # 1-3 ST.

# **COMPLIANCE PLAN(S):**

#### **Compliance Schedule**

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

#### **Monitoring Plan**

The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigation measures.

# **Assignment of Responsibility**

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

# **Administrative Review or Appeal Opportunities**

This decision is effective upon the date the decision or approval by the authorized officer. Under regulations addressed in 43 CFR Subpart 3165, any party adversely affected has the right to appeal this decision. An informal review of the technical or procedural aspects of the decision may be requested of this office before initiating a formal review request. You have the right to request a State Director review of this decision. You must request a State Director review prior to filing an appeal to the Interior Board of Land Appeals (IBLA) (43CFR 3165.4).

If you elect to request a State Director Review, the request must be received by the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, Colorado 80215, no later than 20 business days after the date the decision was received or considered to have been received by the proponent. The request must include all supporting documentation unless a request is made for an extension of the filing of supporting documentation. For good cause, such extensions may be granted. You also have the right to appeal the decision issued by the State Director to the IBLA.

#### **Contact Person**

For additional information concerning this decision, contact Shawn Wiser, Natural Resource Specialist, Little Snake Field Office, 455 Emerson Street, Craig, CO 81625, Phone (970) 826-5086.

SIGNATURE OF AUTHORIZED OFFICIAL:	
	Wendy Reynolds, Field Manager
DATE SIGNED	